
Electric Revenue Decoupling Workshop

DPSC Docket No. 09-276T

*DPSC Staff, the Division of the Public Advocate, and Delmarva Power
& Light Company*

October 25, 2011

Agenda

- 1) Background and Purpose of the Workshop
- 2) Rate Design Overview
- 3) MFV Rate Design Components
- 4) Energy Efficiency & Demand Response Programs
- 5) Communications Plans

Introduction and Background

Objectives:

How did we get here?

What do we want to accomplish in these workshops?

Background on Decoupling

We have been talking about decoupling for years

- In 2005, recommendation that the parties explore alternative delivery rate structures
- In 2006, parties agreed to participate in a docket to investigate decoupling mechanisms
- Regulation Docket No. 59 opened March 2007
 - On September 16, 2008, the Commission issued Order No. 7420 which **approved the potential adoption of a modified fixed variable rate design**
- Filed to implement decoupling in 2009, moved to base rate cases (2009 electric and 2010 gas) - the implementation has not yet been approved

Background on Decoupling

- In 2009, the State enacted legislation setting aggressive goals around reductions in energy use and peak usage.
- In the recent rate cases, the Commission ordered workshops
 - To educate the public
 - To develop an implementation plan
 - To identify programs / mechanisms designed to save customers money through efficiency and conservation

“Once a proposed plan for the implementation of the MFV rate design has been completed, the Parties shall present the proposed plan to the Commission for its consideration.”
- Decoupling provides a mechanism to ensure that the utilities’ rate design is aligned with supporting Customers energy efficiency

Background on Decoupling

The purpose of the Workshops is clearly expressed in the Commission Orders

Both the electric and gas rate case settlement, as approved by the Commission, state the purpose of these workshops:

Participation in such workshops shall be for the purpose of constructively participating in the development of the proposed implementation plan for the MFV rate design.

Decoupling - What it is, and what it is not

What it is:

- applicable to the delivery portion of the bill (25 to 35% of the total bill)
- a way to recover only the actual cost of delivery service approved by the Commission in a rate case
- a mechanism that is designed to mitigate impact to low usage Customers
- a change that allows the Company to assist customers in conservation; an interest of the utility company and the State
- **revenue neutral to the Company**

What it is Not:

- a way to guarantee profits to the Company; the Company must still manage its costs
- a way to recover increased costs of service outside of a full rate case
- a mechanism that impacts the supply portion of the bill; dynamic pricing and load control programs are designed to impact supply side costs

Rate Design Overview

Objectives:

What are the principles of rate design?

How does decoupling fit into these principles?

What is a Modified Fixed Variable rate design?

Modified Fixed Variable Rates

Utility Assets, Operations, Costs and Rates

October 25, 2011

Why Do Costs Matter?

- Utility rates are designed to
 - Treat similar customers equally
 - Avoid one type of customer subsidizing another customer type
 - Recover reasonable costs
 - Provide the utility the opportunity to earn a specified return on investment
 - Maintain the utility's ability to attract new funds for replacement, enhancement and expansion

Utility versus Business

- Utility
 - Must serve all customers
 - Must meet demand of all customers
 - Must operate around the clock
 - Prices are set by tariff
 - High fixed costs
 - Regulated
- Business
 - Can choose its type of customer
 - Can be “out of stock”
 - Can select business hours
 - Can change prices at will
 - May have low fixed costs
 - No limit on profits; risk of bankruptcy

Customer Myths & Anecdotes

Myth #1: Low usage = low income

Myth #2: Low usage = customer conservation

Myth #3: All residential customers are similar

Myth #4: Low usage = Customers won't conserve at the peak

Myth #5: Decoupling is new & untested

Why Change the Rate Form Now?

- Customers have different usage patterns (lifestyle choices) that impact utility costs
- Energy conservation programs have, can and will impact usage and the utility's sales
- Advanced metering allows for additional information and options

Why Change the Rate Form Now?

- Present rate structure provides utility with greater revenue if sales increase
- Energy efficiency methods cost less than building new facilities
- Utility has less incentive to support energy efficiency (see first bullet)

Make the utility an interested partner in energy efficiency

Cost Functionalization – 1st Step

- Cost can be associated with the four utility functions
 - Energy Supply – purchase of electricity
 - Transmission – bulk delivery of electricity (high voltage lines and substations)
 - Distribution –distribution system (wires, poles and transformers)
 - Customer Service – meters and meter reading, service line, billing and customer contact

Functions Covered by MFV Rates

- “Local” functions
 - Distribution
 - Customer Service
- Both regulated only at the state level
- Regulated monopoly avoids duplication of facilities and costs
- Approximately 25 – 35% of total bill

Cost Classifications – 2nd Step

- Three types of costs
 - Customer – varies with the number of customers
 - Demand – varies with the customer's impact during the peak period
 - Volumetric (commodity) – varies with the amount and time of usage of the customer

These costs can be equipment/facility related or the expenses to perform these functions

Customer Costs

- The cost incurred by the utility to provide services to a customer, such as:
 - Meter and meter reading
 - Service line
 - Billing
 - Customer service
 - Customer service or outage response

Demand Costs

- The cost incurred by the utility to serve a customer's peak (maximum) distribution usage, such as:
 - Distribution wires
 - Transformers
 - Substation equipment
 - System operations

Volumetric Costs

- The cost incurred by the utility to serve a customer's usage, such as:
 - kWh and associated losses

How Rates Are Developed

- Total the allowed costs by classification
- Measure the “billing units” by classification
 - Customers or meters
 - Demand (peak) (kW)
 - Volumetric (kWh)
- Divide the costs by the respective billing units to develop the “rates”

Where Was the Demand Charge?

- Residential and small commercial
 - Demand meters had cost 3-5 times more and were not considered cost effective
 - Customers were presumed to be similar
 - Utility (and others) thought that customers had limited desire or ability to control usage
- Medium and large customers have had demand rates for many years

Current Volumetric Rate

- Customer Charge and Volumetric Charge
 - Demand costs divided by volume not peak demand
 - Some customer costs collected by volume
- During adverse weather, sales are higher and utility over collects for customer and demand costs
- Some of lower usage customers' costs are paid by higher usage customers

Fixed Variable Rate (FV)

- Three part rate (customer, demand and volumetric)
- Customer opportunity to
 - Reduce demand at peak periods
 - Reduce volumetric usage by efficiency and/or conservation

Modified Fixed Variable (MFV)

- Customer Charge
- Delivery Demand Contribution

Rate design that has been modified to reduce the impact of the change
- gradualism

Modified Fixed Variable (MFV)

- Customer's distribution rate (25-35% of total bill)
 - Tailored to individual peak usage
 - Not affected by weather
 - Not affected by the actions or inactions of other customers
- Customer gets a stable delivery charge
- Energy efficiency efforts don't change the Company's revenue
- Used in Georgia for over ten years
- Peak Load Contribution (PLC) has been used since 2006

Communications and Education

- Key to successful implementation by the Company
 - Explain the new MFV rate
 - Explain how to save with efficiency and conservation
 - Explain how lifestyle impacts personal costs
- Understand the transition
 - “Modified” to reduce the impact
- How advanced metering will offer more benefits in the future

Modified Fixed Variable (MFV) Rate Design

Objectives:

What are the components of this rate design?

What are impacts to customers?

What's New...

- The Delivery Demand Contribution (DDC) is the annual transmission PLC for each customer.
- The DDC (a kilowatt charge) replaces the current volumetric kilowatt-hour distribution charge.
- The DDC collects costs associated with the wires, transformers, substation equipment and system protection/control equipment necessary for the reliable delivery of electric service.
- The DDC rate structure links:
 - Customers who contribute most to the system's maximum load and therefore the costs to serve that load so that
 - Customers that use less during the peak period will pay less.

Why MFV...

- The parties reviewed a variety of rate structures and were able to agree that MFV rate design was the best fit to address their goals.
- The MFV rate is designed:
 - to collect costs based on a customer's own usage during a peak;
 - to disassociate the effects of weather on revenue collection;
 - to be unaffected by the actions of other customers.
- Impact of the change in rate design is minimal and creates a more direct link between costs and their causation.

What about the Customer Charge...

- Adjustment of the customer charge is a normal part of any rate case review.
 - It always has been a part of the traditional rate design
 - It will continue to be part of the MFV rate design
- Historically, the customer charge has not recovered all the customer-related costs due to the impact that would have on low-usage customers.
- During the decoupling discussions all parties agreed that appropriate rate making should continue to address this issue.
- The parties believes that gradual movement to a fully allocated customer charge allows customers to adapt.

Range of Impacts: MFV Rate and Gradual Change to Customer Charge

* * * For Illustrative Purposes * * *

	<u>Average Customer</u>		<u>1/2 Average Customer</u>		<u>2 x Average Customer</u>	
	<u>Current</u>	<u>MFV</u>	<u>Current</u>	<u>MFV</u>	<u>Current</u>	<u>MFV</u>
<u>Usage Pattern</u>						
Summer Usage (kWh)	1,021	1,021	511	511	2,042	2,042
Winter Usage (kWh)	746	746	373	373	1,492	1,492
DDC (kW)	2.964	2.964	1.482	1.482	5.927	5.927
<u>Bill Component</u>						
Customer Charge	\$ 8.20	\$ 12.00	\$ 8.20	\$ 12.00	\$ 8.20	\$ 12.00
Delivery Charge						
kWh	\$ 21.46		\$ 10.73		\$ 42.93	
DDC		\$ 17.04		\$ 8.52		\$ 34.09
Supply	<u>\$ 94.34</u>	<u>\$ 94.34</u>	<u>\$ 47.17</u>	<u>\$ 47.17</u>	<u>\$ 188.67</u>	<u>\$ 188.67</u>
Total	<u>\$ 124.00</u>	<u>\$ 123.38</u>	<u>\$ 66.10</u>	<u>\$ 67.69</u>	<u>\$ 239.80</u>	<u>\$ 234.76</u>

Energy Efficiency and Demand Response Programs

Objectives:

Review the current energy efficiency programs available to Delmarva Power's residential customers in Delaware.

Review Delmarva's current proposed Demand Response Programs that are pending before the Delaware Public Service Commission

Energy Efficiency Programs

- Delaware established a Sustainable Energy Utility (SEU) in 2007, programs were launched in early 2009.
 - The Delaware SEU is responsible for the development, implementation and funding of statewide energy efficiency programs.

Visit the SEU web site for details: www.seu-de.org/
- Low Income Weatherization programs are also available to qualifying customers as part of the state of Delaware's Weatherization Assistance Program.
- Delmarva sponsors an annual Low Income Customer Energy Summit (October 12, 2011)
 - Supports state agencies
 - Offers educational programs to help agencies communicate important information to customers
 - Provides a forum for regulators, agencies, and others to examine issues impacting customers

Delmarva's Demand Response Programs

- Delmarva has proposed Demand Response Programs that are pending before the Delaware Public Service Commission:
 - Dynamic Pricing Phase In
 - Offer a Critical Peak Rebate program to customers
 - Customers can get a rebate for using less during peak periods
 - No penalties for customers who do not scale back their energy use during a peak period
 - Goal is to lower costs when the market price for energy is at its highest
 - Air Conditioning Cycling Program
 - Voluntary program offered to residential customers where Delmarva installs thermostats or switches which cycle Air Conditioning during peak times
 - Customers will receive a credit when equipments is installed
 - Customer will receive annual credits

Customer Education and Communication

Objectives:

Why is it important?

How does Delmarva Power intend to communicate?

What are the key messages?

Customer Education

- The parties are committed to proactively educating customers on the new rate design.
- Key Components of the Decoupling Education Plan include:
 - **Who?** (the impacted customers - Residential and Small Commercial)
 - **What?** (changes on the bill, changes in how customers can lower their bills)
 - **When?** (PSC approves new rate design; Implementation could take up to three months, during which education plan occurs)
 - **Why?** (to align the Company with the goals of our customers → to reduce the cost of electricity)
 - **How?**

Customer Education

Communication Channels:

- News releases, bill inserts, website and *Lines* (customer newsletter) article
- Call Center/Energy Advisers
- Speakers Bureau presentations, including joint presentations with Staff
- Radio & print advertising
- Social media (Twitter & Blog)

Target Audiences:

- Customers
- Media
- Legislators
- Editorial boards
- Community groups
- Opinion leaders

Take Control Delaware Campaign

- Delmarva Power provides customers with energy efficiency tools and tips such as:
 - On-line Energy Advisory Tools – “My Account”
 - Active Community Speakers Bureau Program
 - Energy Efficiency tips and ideas included in Bill Inserts
 - Website content and links to the SEU
- AMI will enable future energy efficiency and demand response opportunities:
 - More detailed consumption information will be provided to customers via web link using the “My Account” tool.
 - Future offerings could include improved customer information which can help customers make better informed energy efficiency decisions.

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